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ABSTRACT

This self-instructional module, the fourteenth in a series of 16 on techniques for coordinating work experience programs, deals with vocational assessment. Addressed in the module are the purposes of vocational assessment, the types of information that are gathered in the vocational assessment process, and available vocational assessment techniques and their application in work experience programs. The module includes a series of pretests, learning activities, and self-checks; a posttest; answers to the pretests and posttest; and a list of additional resources. Appended to the module are descriptions of various commercial assessment systems, work sample tests, manual dexterity tests, and a sample vocational assessment performance statement. (MN)

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# Vocational Assessment

This module contains two major parts:

1. Material and information to be used in vocational education assessment of students participating in a cooperative work experience program.

2. Descriptions of vocational assessment techniques.

Prerequisite for module: Module 1: Values of Cooperative Education, Module 2: Coordination Techniques, Module 8: Developing and Implementing Training Plans, and Module 9: Evaluating On-The-Job Training.

When you have completed this module, you will:

GOAL 1: Know the purposes of vocational assessment and the types of information which should be gathered.

GOAL 2: Know the available vocational assessment techniques and how they are used in the work experience program.

To begin this self-instructional module, please turn to the pre-test on page 2.

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## ACKNOWLEDGMENTS

The Work Experience Modules were developed by Work Experience teacher-coordinators, Vocational Education teacher-coordinators, University teacher educators, and Special Needs consultants in Iowa. Funding for the coordination techniques project was provided through grants from Iowa Department of Public Instruction, Career Education Division.

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Module 1: Values of Cooperative Training - Dr. Steven Corbin
Module 2: Coordination Techniques - Dr. Jim Burrow and Dr. Roger Ditzenberger
Module 3: Obtaining a Training Station - Mrs. Bonnie Schmalle
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Module 14: Vocational Assessment - Dr. William Callahan
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Module 16: Affirmative Action - Dr. Carl Shawhan and Dr. Ray Morley

The Work Experience Advisory Committee designed the coordination techniques model and developed the module titles and goals. The committee was also extensively involved in editing each module and suggested additions, corrections, and revisions. The Work Experience Advisory Committee included:

Dr. Roger Ditzenberger - Project Co-Director
Dr. Jim Burrow - Project Co-Director
Dr. Ray Morley - Project Consultant
Dr. William Callahan - Advisory Committee Member
Mr. Larry Esk - Advisory Committee Member
Mr. Ed O'Leary - Advisory Committee Member
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The modules have been field-tested by over 250 teachers in Special Education and over 200 pre-service students in Special Education and Vocational Education.

Production of the modules was coordinated by Ms. Linda Welton. Modules were typed, edited, and assembled by Ms. Linda Welton, Ms. Julie Adams, and Ms. Kris Eichelberger.

WORK EXPERIENCE MODULES

BUSINESS EDUCATION AND ADMINISTRATIVE MANAGEMENT
UNIVERSITY OF NORTHERN IOWA
in cooperation with
SPECIAL NEEDS SECTION
IOWA DEPARTMENT OF PUBLIC INSTRUCTION
1982

PRE-TEST: GOAL 1

KNOW THE PURPOSES OF VOCATIONAL ASSESSMENT AND THE TYPES OF INFORMATION WHICH SHOULD BE GATHERED

DIRECTIONS: If you wish to attempt the goal assessment, complete the questions for the pre-test. If you do not wish to take the pre-test, turn to page 3 for the Learning Activities.

1. What is the value of vocational assessment to (1) the work experience teacher coordinator, and (2) the student.

2. Describe the eight types of information that should be gathered in a vocational assessment.

DIRECTIONS: When finished with the pre-test, please turn to page 16 and compare your answers with the pre-test key. If you missed any questions, read the material on pages 3-5.

## LEARNING ACTIVITIES

### GOAL 1: KNOW THE PURPOSES OF VOCATIONAL ASSESSMENT AND THE TYPES OF INFORMATION WHICH SHOULD BE GATHERED

DIRECTIONS: Read pages 3-5 and complete the self-check.

### INTRODUCTION

Vocational assessment is an ongoing process of information-gathering and analysis. Work experience teachers use vocational assessment to help in determining the strengths and weaknesses of a student in relation to potential vocational placements. Vocational assessment has an additional value as an aid for the student in developing an awareness of his/her individual abilities and interests. With that type of information, the student can make more appropriate and better informed choices related to a vocational future.

### PURPOSE

The primary purpose of vocational assessment is to provide an ongoing data base for decision making. The work experience teacher makes curriculum decisions, selects instructional strategies, and evaluates job placements for each student and designs training plans that take into account information obtained through ongoing evaluation. In order to make the best possible vocational development decisions, a detailed personal profile should be be developed for each student through a variety of vocational assessment procedures.

The second purpose of vocational assessment centers around the concept of vocational preparedness. The utilization of the vocational assessment process should be a mechanism for creating an improved awareness by the student of his/her skills and abilities. Achieving increased student self-awareness should be relatively easy to accomplish. When students are involved in vocational assessment they need to be aware of the purposes of the process. Continual interaction with the student regarding his/her reactions to a particular assessment activity should allow the student the opportunity to review his/her attitudes. Once a particular aspect of the assessment process is completed an interview relating to that activity should be carried out. The purpose of the interview is to discuss the activity with the student to solidify their ideas and attitudes.

## TYPES OF INFORMATION

A careful matching of student characteristics and capabilities with job requirements should be based on the analysis of several types of information. The major types of information to be reviewed in the vocational assessment process include: (1) medical, (2) educational/academic, (3) personal/social, (4) interests, (5) work habits/attitudes, (6) aptitudes, (7) learning style, and (8) acquired work skills.

Medical Information. The gathering of medical information relating to the student's visual and auditory acuity as well as their physical condition, capability, and disabilities is imparitive as a prerequisite to vocational planning. Information related to any medication or chronic illness should be included in the student's medical information files so that the physical requirements of the job can be evaluated and compared with the student's potential for performance. Some jobs require specific medical information for all employees such as TB tests or communicable disease screening. Where this is required, special note of the need for this information should be made in the student's medical file.

Educational Information. The type and extent of educational information that should be gathered in the vocational assessment process is determined primarily by the competencies that will be required for satisfactory participation in the adult working world. Effective utilization of verbal and nonverbal communication skills must be evaluated. The level of socialization as reflected in classroom behavior should be considered. Information related to reading, writing, and math skills is important since all relate to job requirements and job seeking skills. More extensive information may be required for specific jobs. Where possible, samples of the actual tasks to be performed on the job should be used in the assessment process.

Personal/Social Information. In the past, this area has been thought to be particularly difficult to evaluate. However, new evaluation instruments are allowing the gathering of information about a student's ability to get along with peers and authority figures such as parents, teachers, or employers, the consistency of the student's moods, as well as the general appearance and motivation of the student. The area of personal/social skills has provided significant problems for many handicapped individuals and the importance of gathering accurate information and utilizing this information in planning vocational and education programs can not be understated.

Interest. Interests have to be considered as a function of the student's awareness. That awareness is directly related to the student's background and experiences. To establish an accurate picture of the students interests it will be necessary to provide awareness-level experiences. These experiences can include field trips, interviews, job shadowing, or may even include the administration of pencil and paper interest inventories that can serve to increase the student's level of awareness as well as provide information on student interests. However, such inventories should be used carefully with an understanding of the student's selection criteria.

Work Habits. This category is designed to analyze the student's on-task behavior in terms of speed and accuracy of work. Additionally, certain aspects of the individual's ability to adjust to repetition, their self confidence, self direction, or need for supervision should be evaluated. The extent to which the student is able to follow directions, work under pressure, or conform to a particular schedule may need to be evaluated depending upon the nature of the specific job. One of the best assessment processes to determine a student's work habits is the use of situational assessment at a job site.

Aptitudes. In evaluating a student's aptitudes, information should be analyzed that describes a student's perceptional motor ability relating to gross and fine motor skills, manual and finger dexerity, eye-hand coordination, and the ability to work with large and small tools, The student's ability to benefit from ongoing training programs, and the student's ability to progress beyond entry level positions within the organization should be determined in making appropriate job placements.

Learning Skills. Within this category the learning style of each individual is an important element in selecting instructional strategies. This evaluation examines the kinds of reinforcers as well as the best methods of instruction that can work for an individual. The student's file should include information related to the kinds of methodology which have worked in the past as well as short term reinforcers that will build to more typical secondary reinforcers. These suggestions will be valuable in enhancing and expediting the learning process.

Acquired Work Skills. These are vocational skills that the student possesses as a result of prior learning both within and outside the school environment. They could be in areas such as lawn care, auto mechanics, or janitorial work, and have a great impact on the nature of additional training required or the student's ability to get and hold a job.

Summary:

After reviewing the primary types of information to be gathered within the vocational assessment process, the value of that process should be apparent. Work experience teachers having access to a comprehensive analysis of each student are better prepared to develop an effective vocational education experience. Students who have participated in the vocational assessment process should have a clear understanding of their strengths and limitations, and should be much better prepared to begin the transition into the working world. With the available information, vocational placements can be made that reasonably match job requirements with student characteristics leading to a much higher probability of job success. Although all areas my not have all procedures available, the assessment process should be undertaken maximizing the available resources. For example, if commercial assessment is not possible the interview or situational assessment could be used.

SELF-CHECK

As a work experience teacher, it is your responsibility to place each student in a training station. Describe the types of student information you would need to make an effective job placement. How would each of your students benefit from the gathering and use of that information?

DIRECTIONS: When finished compare your answer with the information on pages 3-5. If you would like additional information, please turn to the Additional Resources listed on page 20.

## PRE-TEST: GOAL 2

## KNOW THE AVAILABLE VOCATIONAL ASSESSMENT TECHNIQUES AND HOW THEY ARE USED IN A WORK EXPERIENCE PROGRAM

DIRECTIONS: If you wish to attempt the goal assessment, complete the questions for the pre-test. If you do not wish to take the pre-test, turn to page 8 for the Learning Activities.

1. List 7 techniques that can be used to collect background information required in stage one of a vocational assessment.

2. What is a level of performance statement for a vocational assessment?

3. Describe the components of a program statement resulting from a vocational assessment.

4. Describe the relationship between skill development and job engineering.

DIRECTIONS: When finished with the pre-test, please turn to page 16 and compare your answers with the pre-test key. If you missed any questions, read the material on pages 8-12.

## LEARNING ACTIVITIES

### GOAL 2: KNOW THE AVAILABLE VOCATIONAL ASSESSMENT TECHNIQUES AND HOW THEY ARE USED IN A WORK EXPERIENCE PROGRAM

DIRECTIONS: Read pages 8-12 and then complete the self-check.

INTRODUCTION:

There are six stages in the process of vocational assessment leading to job placement. Those stages are: (1) information gathering, (2) statement of performance levels, (3) program statement, (4) matching job characteristics and student needs, (5) skill development/job engineering, and (6) placement. In this section of the module, each of the six stages is discussed, and assessment techniques to be used are described. Some of the vocational assessment devices that are often used are described more thoroughly in Appendices 1-6.*

STAGE ONE: (Background Information)

As a first step in the assessment process, background information relating to each student must be gathered. Much of the needed information may already be available in the student's educational files. If not, the student's parent/guardian may be asked to provide needed personal information. Usually, it will be necessary to gather other information that is not currently available. It is likely that some amount of testing will be required. There are seven major types of vocational assessment techniques that would be appropriate to use in gathering background information: (1) paper and pencil techniques (2) manual dexterity tests (3) commercially developed assessment systems (4) self-developed work samples (5) behavioral analysis techniques (6) situational assessment, and (7) interview techniques.

Paper and Pencil Techniques: Paper and pencil techniques are used to provide information in a variety of skill areas from basic academics through specific vocational areas. However, when using paper and pencil tests it is very important to determine exactly what information is being gathered through the use of the test and how accurate the test is. Paper and pencil tests are typically used to evaluate;

1. Interests
2. Academic performance
3. Attitudes/values
4. Self concept

Appendices 1-6 gives detailed information about specific tests available for use.

*For a comprehensive review of assessment instruments see Assessing and Evaluating the Career Development of Special Education Students., Department of Public Instruction, Career Education Division, Grimes State Office Building, Des Moines, Iowa.

Manual Dexterity Tests: Manual dexterity tests provide information relating to a student's aptitude in fine motor skills. Additional aspects of a student's work habits or attitudes, ability to follow directions, performance of routine or repetitive tasks and communication skills can be gathered while the manual dexterity test is being administered. It should be remembered that the primary purpose of the tests relate to the perceptual motor skills. Any secondary information that is gathered must be supported through the use of standardized procedures and observational checklists and should not interfere with the test administration. Examples of manual dexterity tests available for use include:

1. Crawford Small Parts Dexterity Test
2. O'Connor Finger Dexterity Test
3. Purdue Peg Board
4. Pennsylavania Bimanual Work Sample
5. Bennet Hand Tool Dexterity Test
6. Stromberg Dexterity Test

Again, detailed information about the tests is located in Appendices 1-6.

Commercially Developed Assessment Systems: Commercial assessment systems typically contain comprehensive collections of subtests that measure attributes of students that relate to their vocational performance. The major commercial assessment systems which are available include:

1. Testing Orientation and Work Evaluation in Rehabilitation (TOWER)
2. Comprehensive Occupational Assessment and Training System (COATS)
3. Philadelphia Jewish Employment and Vocational Work Sample Battery (JEVS)
4. Vocational Information and Evaluation System (VIEWS)
5. McDonald Vocational Capacity Scale (VCS)
6. Singer Vocational Evaluation System
7. Talent Assessment Program (TAP)
8. Microtower
9. VALPAR Component Work Sample Series
10. Wide Range Employment Sample Test (WREST)

A brief description of each is included in Appendices 1-6. These systems allow for easy communication between agencies cooperating in the habilitation process. However, they do have some significant limitations. Brolin (1973) discribed 10 questions to ask when considering a commercial system:

1. Does the system take into account expectancy to fail?
2. Does the system take into account academic limitations?
3. Does the system take into account verbal limitations?
4. Does the system take into account experience limitations?
5. Does the system allow for more than one trial on tasks?
6. Does the system allow for repeated instruction and check for comprehension?
7. Does the system have face validity?
8. Does the system allow for appropriate conditions for testing, i.e. pleasant surroundings, orderly administration, and fatigue?
9. Does the system use "spaced" rather than "massed" evaluation?
10. Is the system adequately normed on handicapped individuals and the workers who are doing the various types of tasks?

Self-Developed Work Samples: Work samples, if conducted at the work site, can give a very accurate representation of the skills required for performance in a particular type of work. In addition, the job site can be used to evaluate additional work skills (i.e. student's ability to react to the entire environment). Brolin (1973) listed the following values of work samples:

1. Work samples provide job exploration.
2. Work samples allow actual job simulations to be brought in the classroom setting where they can be tried without excess pressure.
3. Work samples are motivating for students.
4. Work samples can provide motivation for classroom learning by establishing relevance for certain academic skills.
5. Work samples allow habilitation personnel to compare students abilities to those of workers employed in the occupation.
6. Work samples may be used as behavioral change instruments, allowing training and work assessment.
7. Work samples allow determination of students strengths and weaknesses on work related tasks while the student is still in the program where observation can take place.
8. Work samples can build confidence by providing successful experience for students who have experienced failure in the school.

Behavior Analysis Techniques: Behavior analysis is a process in which specific behaviors are identified, a training environment is described, initial strength of desired behaviors are measured, and a training program is designed to increase those desired behaviors to a satisfactory level. The program is then implemented until the specific desired behavior reaches a satisfactory level of performance. A commonly used system that applies this method is the "Try Another Way" procedure developed by Marc Gold. (Marc Gold & Associates, Inc., P.O. Box 5110, Austin, TX 78763)

Situational Assessment: The situational assessment is used to evaluate the student's performance in actual on-the-job situations, The evaluation of the student is dependent upon objective data obtained from the student's supervisor so that a good correlation between the actual requirements in the work situation and the observation can be established. TenBrink (1975) and Sitlington and Wimmer (1978) have listed 5 steps in the development of such an effective evaluation scale:

1. Specify an appropriate learning outcome.
2. List the important characteristic of each outcome.
3. Define a scale for each characteristic by establishing descriptions for the extremes of the continuum and then describing several points between the extremes.
4. Arrange items measuring each characteristic throughout the scale.
5. Write specific instructions for the evaluator.

Interview: The structured interview technique is used to gather data from the student about the students strengths and weaknesses. The format of The Vocational Assessment Performance Statement and The Vocational Program Statement (see Appendices 7-11) can be used to structure the interview process.

STAGE TWO: (Student's Performance Level)

Once detailed background information has been obtained using the procedures desribed, it is important to develop a clear statement of the student's present level of performance. When describing the present level of performance, attention should be given to the recency of the data gathered as well as the reliability and validity of that data. Additionally, details of the information gathering process are to be included in order to facilitate exchange of the information with other agencies. The key factor in evaluating the current level of performance statements should be the thoroughness of the data obtained in terms of the vocational future of the student. It is important to consider the relative value of different techniques not in terms of formal verses informal or standardized verses non-standardized but rather in terms of its value to a particular students vocational development. The following list identifies the major concepts used in evaluating the present level of performance statement:

1. Does the present level of performance statement list strengths of the student in each problem area?
2. Does it list weaknesses of each student in the problem area?
3. Does it include information about effective techniques and procedures to improve student performance.
4. Is it based on information gathered from a variety of diagnostic procedures?
5. Are the instruments or processes used in the evaluation identified?
6. Does it contain information on all the desired categories?
7. Is all the information instructionally relevant?
8. Is it written in understandable language?
9. Are any unresolved assessment questions identified?

An example performance statement is shown in Appendices 7-9.

STAGE THREE: (Program Statement)

Given the current level of performance and the accumulation of accurate background information, the areas most likely to be improved can be identified from the performance statement. Stage three represents the development of goals for the educational program based on the initial stages of the vocational assessment process. The resources to be used to meet students needs in highly dependent upon the availability of instructional programs. As examples, a student needing improvement in personal hygiene and grooming skills may well benefit from courses in home economics and science, while a student needing refinement of welding skills may benefit from an on-the-job training program at a local work site. Stage three represents a synthesis of the information and the development of a statement of relevant goals to guide the implementation of an instructional program. Review the sample program statement in Appendices 10-11.

STAGE FOUR: (Matching Placement Possibilities to Needs)

Within stage four the instructor makes recommendations about where the needed services can be obtained. Considerations should be given to the following instructional program sites: (1) regular classroom with modifications (2) work experience special class (3) vocational education class with modifications (4) university/community college (5) sheltered workshop (6) day activity center (7) community mental health service

(8) job sites (9) leisure service sites (10) daily living sites. Regardless of the placements used, it is important to remember the requirements for the development of training plans. Module 8: Developing and Implementing Training Plans, outlines a process for assisting in the design of effective training. Additionally, it describes the process for matching the needs of students with the community resources available.

STAGE FIVE: (Skilled Development Job Engineering)

The process of skill development is twofold. Not only is it necessary to develop the skills required for entry level jobs but once entry level job skills have been learned it is important to continue the skill development process so that higher level jobs can become a reality. Additionally, it is important during stage five to look at any job engineering that may be required to modify the job site to the needs of the student. For some handicapping conditions this may be as simple as lights on telephones for deaf students or changing the leg length on desks for individuals in wheelchairs. Some jobs may require a division of labor so higher level cognitive skills are not assigned to a mentally retarded worker.

STAGE SIX: (Placement)

Module 3: Obtaining A Training Station, describes the process of locating appropriate jobs for students and placing them on the job. Once the student is placed, the on-going job of evaluating a training situation begins. This may include a return to stage two if it is determined that an inappropriate placement was made or that additional work can improve the student's ability to move vertically within the organization. Using previously gathered or additional assessment data, you can determine the appropriateness of the goals, objectives, or criteria originally developed in Stage 3.

Summary

This section of the module has described the relationship of vocational assessment and the job placement process. A systematic process will provide the opportunity to carefully review student characteristics through the use of a variety of assessment techniques. Then an instructional program can be designed to prepare the student for employment. As the teacher prepares to place the student in a supervised employment situation for on-the-job training, the information developed throught the vocational assessment process/ should anticipate potential problems and thus result in more effective and appropriate placement. Additionally, the data can be used to help solve problems that occur during training by allowing the teacher coordinator to analyze the assessments data in light of new information from On-the-Job Training Evaluation. For example fewer tasks with more repetition may be emphasized during the second quarter than during the first.

SELF-CHECK

1. Describe the techniques you would use to gather the necessary background information for each of your students. (include your rationale for selection)

2. List the major instructional program site alternatives available to students in your community.

3. Discuss how the vocational assessment procedure would be helpful in developing training plans.

DIRECTIONS: When finished compare your answers with the information on pages 8-12. If you would like additional information, please turn to the Additional Resources listed on page 20.

# POST TEST

DIRECTIONS: To measure your understanding of this module, please complete the following questions.

1. List eight types of student information that should be gathered in a vocational assessment.

2. Complete the following chart describing the vocational assessment process.

| Stage | Purpose | Description of Activities |
|---|---|---|
| | | |
| II | | |

| | | |
|---|---|---|
| III | | |
| IV | | |
| V | | |
| VI | | |

GOAL 1

1. What is the value of vocational assessment to (1) work experience teacher-coordinator, and (2) the student.

   Work experience teachers use vocational assessment to help in determining the strengths and weaknesses of a student in relation to potential vocational placements. Vocational assessment has an additional value as an aid for the student in developing an awareness of his/her individual abilities and interests. With that type of information, the student can make more appropriate and better informed choices related to a vocational future.

2. Describe the eight-types of information that should be gathered in a vocational assessment.

   1. Medical
   2. Educational/academic
   3. Personal/social
   4. Interests
   5. Work habits/attitudes
   6. Aptitudes
   7. Learning style
   8. Acquired work skills

   A detailed description of each type of information listed above can be found on pages 4-5.

GOAL 2

1. List 7 techniques that can be used to collect background information required in stage one of a vocational assessment.

   1. Paper and pencil
   2. Manual dexterity
   3. Commercially developed assessment systems
   4. Self-developed work samples
   5. Behavioral analysis techniques
   6. Situational assessment
   7. Interview

2. What is a level of performance statement for a vocational assessment?

   A level of performance statement describes a student's strengths and weaknesses. After diagnosis has occurred, the evaluator develops a statement that describes procedures used, specific strengths and weaknesses identified, and effective techniques and procedures needed.

3. Describe the components of a program statement resulting from a vocational assessment.

   1. Goals to be achieved.

   2. Instructional programs or educational resources to be used.

   3. Program structure or procedures to be followed.

4. Describe the relationship between skill development and job engineering.

   When developing job training sites, consideration should be given to job conditions that will likely lead to student failure. When such conditions are identified, attention should be given to modifying the job site to the needs of the student whenever possible.

# POST TEST KEY

1. List the eight types of student information that should be gathered in a vocational assessment.

   a. Medical
   b. Educational/academic
   c. Personal/social
   d. Interests
   e. Work habits/attitudes
   f. Aptitudes
   g. Learning style
   h. Acquired work skills

2. Complete the following chart describing the vocational assessment process.

| Stage | Purpose | Description of Activities |
|---|---|---|
| I | To develop a comprehensive understanding of the student's background. | 1. Check student's educational file.<br>2. Meet with parent/guardian.<br>3. Administer necessary testing to determine student's interests, aptitudes, and abilities. |
| II | To develop a clear statement of the student's present level of performance. | 1. Using background information and testing data, develop a specific statement of the student's ability and skill levels as they relate to the student's vocational program. Include details on the information gathering procedures. |

| | | |
|---|---|---|
| III | To develop a statement of the educational program designed to meet student needs. | Based on information collected and available resources, objectives of an educational program for the student should be specified. Types of educational experiences needed should be identified. |
| IV | To recommend where needed instruction and services can be obtained. | Identify available instructional and support resources available for the student. Then recommend those most appropriate to the student in developing vocational skills. |
| V | To analyze job site for possible job development or job engineering needs. | A selected job site should be carefully analyzed to insure that skill development is possible for the student. Recommendations should be made to accommodate the job to the special needs of the student. |
| VI | To place the student in an appropriate job for training. | Complete a comprehensive job selection and placement procedure using effective cooperative education coordination practices. |

## ADDITIONAL RESOURCES


Assessing and Evaluating the Career Development of Special Education Students., Department of Public Instruction, Career Education Division, Grimes State Office Building, Des Moines, Iowa.

Brolin, Donn E. Vocational Preparation of Retarded Citizens. Charles E. Merrill Publishing Co., 1976.

Brolin, Donn E. and Kokaska, Charles J. Career Education for Handicapped Children and Youth. Charles E. Merrill Publishing Co., 1977.

Clark, Gary M. and White, Warren J. Career Education for the Handicapped: Current Perspectives for Teachers. Educational Resources Center, 1980.

Meers, Gary D. Handbook of Special Vocational Needs Education. Aspen Systems Corporation, 1980.

Neff, Walter S. Work and Human Behavior. Aldine Publishing Company, Second Edition, 1977.

Wehman, Paul and McLaughlin, Phillip J. Vocational Curriculum for Developmentally Disabled Persons. University Park Press, 1980.

Weisgerber, Robert A., Dahl, Peter, and Appleby, Judith A. Training the Handicapped for Productive Employment. Aspen Systems Corporation, 1981.

Sitlington, P.L. and Wimmer, D. Vocational Assessment Techniques for the Handicapped Adolescent. CDEI, Fall, 1978, p.p. 75-87.

TenBrink, T. Evaluation: A Practical Guide for Teachers. New York, McGraw Hill, 1974.

## Commercial Assessment Systems

### Comprehensive Occupational Assessment and Training System (COATS)

PREP Inc.
1575 Parkway Avenue
Trenton, New Jersey

The COATS system is made up of four separate assessment components: (1) Living Skills, (2) Work Samples, (3) Job Matching System, and (4) Employability Attitudes. Each component includes assessment, training, and prescriptive activities. It is far more comprehensive than other systems as it includes training.
Cost: Approximately $16,000 - $18,000.

### JEVS Work Sample Battery

Vocational Research Institue
Jewish Employment and Vocational Service
1913 Walnut Street
Philadelphia, Pennsylvania 19103

### MacDonald Vocational Capacity Scale (VCS)

This system is designed for retarded young adults, between 16 and 30, IQ 84 or less.

### MicroTower

ICD Rehabilitation and Research Center
340 East 24th Street
New York, New York 10010

The MicroTower is a group approach system designed to evaluate disadvantaged and disabled adults and adolescents ranging from mildly retarded to average ability. The system includes a programmed learning period prior to assessment.

### The Singer Vocational Evaluation System

Singer Education Division
Education Systems
3750 Monroe Avenue
Rochester, New York 14603

The Singer System consists of 20+ audio-visually oriented work samples in which the client is involved in actual production of a product or process. Samples are independent of each other and may be purchased separately.
Cost: $950 - $1800 per sample.

### Talent Assessment Programs (TAP)

Talent Assessment Programs
7015 Colby Avenue
Des Moines, Iowa 50311

The TAP battery consists of 10 action instruments designed to measure the characteristics applicable to work in industrial or technical occupations.
Cost: From $2500 - $3000 depending on distance from Des Moines.
(Special rates for teacher training institutions.)

TOWER (Testing, Orientation, and Work) Evaluation in Rehabilitation.

ICD Rehabilitation and Research Center
340 East 24th Street
New York, New York 10010

The TOWER system was developed in 1936 for the crippled and disabled and covers 18 areas of evaluation at a fairly high level.

VALPAR Component Work Sample Series

VALPAR Corporation
655 North Alvernon Way
Suite 108
Tuscon, Arizona 85716

The VALPAR system consists of 12 self-contained, independent work samples with new samples in the development process.

Vocational Information and Evaluation Work Samples (VIEWS)

Vocational Research Institute
Jewish Employment and Vocational Service
1913 Walnut Street
Philadelphia, Pennsylvania 19103

The VIEWS system is a series of work samples designed to assess the work potential of persons with learning disabilities and various levels of mental retardation, The system includes demonstration and training prior to assessment.

Wide Range Employment Sample Test (WREST)

Guidance Associates of Delaware, Inc.
1526 Gilpin Avenue
Wilmington, Delaware 19806

The WREST was developed in a sheltered workshop environment, specifically for the mentally retarded.
Cost: $745 - $895.

## Manual Dexterity Tests

### I. Crawford Small Part Dexterity Test

Purpose: Measures finger dexterity (eye hand coordination)

Administered: Individually

Time: No time limit, takes approximately 15 minutes, the student is timed on 36 holes after 6 trial holes

Examinee's position: Seated

Practice session: Yes, 6 trials (pins and collars)

Tools/Equipment: Tweezers, pins, collar, screws, and testing board, screwdriver

Percentile Norms: Yes, separate norms for males and females

Procedure: The student uses the tweezers and picks up one pin at a time from the first pan and places one pin in each hole across the top row on the left side. After placing a pin in each hole, the student takes a collar from the second pan and places one on each pin. The first six holes are a practice and then the student does the next 36 holes the same as he did the practice holes being timed on those 36. When the student has completed the left side he then goes to the right side of the board and places a screw in each hole across the top row screwing them in with his fingers enough that the screw will stand up. After there is a screw in each hole, go back and use the screwdriver to screw the screws the rest of the way in. The following 36 holes will be done the same way while being timed.

Address: Stoelting Company
1350 South Kostner Ave.
Chicage, IL

### II. O'Conner Finger Dexterity Test

Purpose: Measures finger dexterity (measures ability to rapidly manipulate small objects)

Administered: Individually

Examinee's Position: Seated

Practice Session: Yes

Tools Required: Pins, testing board with 100 holes

Time: 8-16 minutes, First 50 recorded (timed) and Second 50 recorded (timed)

Raw Score: (Number of seconds to complete the second half X 1.1)

$$+ \frac{\text{Number of seconds to complete the first half}}{2}$$

Percentile Norms: Separate norms for males and females

Procedure: The student places three pins in each hole.

Address: Stoelting Company
1350 South Kostner Ave.
Chicago, IL

III. Purdue Peg Board

Purpose: Measures finger and manual dexterity

Time: Has a time limit

Examinee's Position: Seated

Practice Session:

Tools/Equipment: Pins, washers, collars, and testing board

Percentile Norms: Yes, for both males and females

Scores:
1. Right Hand
2. Left Hand
3. Both Hands
4. Assembly (both hands)
5. Right + Left + Both

Procedure: Student does the test first with his right hand, then his left hand then with both hands. The student does the test by placing a pin in the hole, place a washer over the pin, place a collar on the washer, and then place a second washer on top.

Address: Purdue Research Association, Inc.
259 East Erie Street
Chicago, IL

IV. Pennsylvania BiManual Work Sample

Purpose: Manual and finger dexterity

Administered: Individually

Time: Takes less than 15 minutes

Examinee's Position: Seated

Practice Session: Yes, 20 for practice

Tools/Equipment: Nuts, bolts, and testing board

Percentile Norms: Yes, only test with norms for the blind
Norms for assembly and disassembly

Procedure: The student takes a bolt, with his right hand, from the right pan, takes a nut, with his left hand, from the left pan and screws the two together. After the student has screwed the nut and bolt together he places it in a hole in the board. The student continues until all holes are filled.

Address: American Guidance Service, Inc.
Publisher's Building
Circle Pines, Minnesota

V. Bennett Hand Tool Dexterity Test

Purpose: Manual dexterity, designed to measure proficiency in using ordinary mechanic tools.

Administered:

Examinee's Position: Standing

Practice Session: No

Time: Approximately 15 minutes, time tested

Tools/Equipment: Nuts bolts, mechanic tools, and testing board

Precentile Norms: No norms for male and females, one standard norm

Procedure: A wooden frame is clamped to a table. There are three sizes of nuts and bolts together on the left upright and ordinary hand tools between the two uprights. The student is to use the hand tools and remove the pieces from the left upright large to small. The large and medium pieces will be placed between the uprights and after the student removes the small pieces he begins reassembling the pieces on the right upright, small to large.

Address: Psychological Corporation
304 East 45th Street
New York, NY

V. Stromberg Dexterity Test

Purpose: Manual dexterity

Time: 10 minutes

Examinee's Position: Standing

Practice Session: Yes, first and second times through are for practice

Tools/Equipment: Colored pegs and testing board

Percentile Norms: Yes

Scores: First and second are practice and the third and fourth timed scores are added

Procedures: Student removes the pegs from the left side of the testing board and places them in the corresponding colors on the right side of the testing board.

Address: Psychological Corporation
304 East 45th Street
New York, NY

## Paper/Pencil Test Instruments

I. Career Assessment Inventory (CAI)

Recommended for: Grades 8 - Adult
A vocational interest inventory primarily for persons seeking careers not requiring a college education; i.e., blue collar occupations.

Author: C.B. Johananssen
Address: NCS Interpretive Scoring System
4401 West 76th Street
Minneapolis, Minnesota 55435

II. Career Maturity Inventory (CMI)

Recommended for: Grades 8 - Adult
A fifty item career attitude scale assessing four vocational areas: self appraisal, occupational information, goal selection, problem solving.

Author: John O. Crites
Address: McGraw Hill
CTB
Del Monte Research Park
Monterey, Califorinia 93940

III. World of Work Inventory (WWI)

Recommended for: Grades 8 - Adult
A career assessment test that assesses career interest, job satisfaction indicator and vocational training potential.

Author: R. Ripley - M. Ripley
Address: NCS Interpretive Scoring System
4401 West 76th Street
Minneapolis, Minnesota, 55435

IV. Work Values Inventory (WVI)

Recommended for: Grades 7 - Adult
Designed to assess fifteen values of particular importance in determining job success and motivation.

Author: Darold Super
Address: Houghton Mifflin Company
Test Dept., P.O. Box 1970
Iowa City, Iowa 52240

## VOCATIONAL ASSESSMENT PERFORMANCE STATEMENT

STUDENT Mike Williams AGE 15 SCHOOL Cedar Falls High School

SCHOOL YEAR Fall 1982/1983 REFERRED BY Mr. James Anderson

| CLINICAL ASSESSMENTS | ASSESSMENT TECHNIQUES | EVALUATOR(S) ADMIN. DATES | RESULTS |
|---|---|---|---|
| 1. MEDICAL | Comprehensive medical exam | Dr. Paul Beem March 5, 1982 | Mike's general health is good. Mike was diagnosed in 1978 as epileptic-grand mal. He takes phenobarbital and dilantin. Mike has not had a seizure in 6 months. |
| 2. SOCIAL | client interview, parent interview, observation in class and inschool job place placement. | Mrs. Jones | Mike's parents appear to be accepting of his handicaps. They are anxious to get him in a vocational program. Mike is enthusiastic about working in the community. Mike swims weekly at the Y but his parents said he enjoyed doing things by himself. Mike has difficulty communicating because of stuttering and is self-conscious of this problem. |
| 3. PSYCHOLOGICAL | WISC | Mrs. Paulsen March 17, 1982 | Verbal/performance - 68/72 and full scale performance was 70 |
| 4. EDUCATIONAL | school records Brigance Diagonstic Inventory of Essential Skills | Mrs. Jones April 29, 1982 | Mike scored 60% on Money and Finance with problems wit'. making change and keeping a checking account. Mike received 50% over transportation schedules and reading a map, and 62% on computation of whole numbers (no division problems). |
| WORK EVALUATIONS | | | |
| 1. INTERVIEWS | Student Interview | Mrs. Jones April 20, 1982 | Mike said he wanted to be a truck or ambulance driver. Mike said he did not want to go to Goodwill or any type of school. He said he wanted to go to work immediately. |
| 2. VOCATIONAL TESTING | Purdue Pegboard | Mrs. Jones | Gross motor skills are good but Mike became frustrated when doing fine motor activities and scored low on fine motor activities. |
| | Reading-Free Voc. Interest Inventory | Mrs. Jones | Mike's main interest was automobiles with some interest in building trades and janitorial. |

Appendix I

## VOCATIONAL ASSESSMENT PERFORMANCE STATEMENT
(continued)

| | | | |
|---|---|---|---|
| 3. WORK/JOB SAMPLES | Not given | | |
| 4. SITUATIONAL ASSESSMENT | Not given | | |
| **WORK ADJUSTMENT** | **ASSESSMENT TECHNIQUES** | **EVALUATOR(S) ADMIN. DATES** | **RESULTS** |
| | Inschool job evaluation<br>Teacher observation | Spring, 1982<br>Mrs. Jones | Classroom - Mike is late to class, slow and meticulous worker. He does keep on task, and work is correct and neat. Job - Lunchroom - Mike has trouble communicating with co-workers. Mike became upset when some school boys made "fun" of him. |
| **JOB-SITE EVALUATION** | | | |
| | Cedar Falls High School Cafeteria | March 1 - May 25, 1982<br>Mrs. Jones<br>Ms. Martins - Kitchen Supervisor | Mike scraped plates and wiped tables. He was enthusiastic about the job and worked hard and worked with sufficient speed. At the beginning Mike had difficulty retaining instructions from one day to another. Mike was able to complete the job after bein shown several times. When Mike was assigned the chore of placing dirty plates on trays to go through the dishwasher he was unable to complete the work. Mike's physical appearance was satisfactory. |

VOCATIONAL ASSESSMENT PERFORMANCE STATEMENT
(continued)

VOCATIONAL FINDINGS

1. STRENGTHS

Mike does well on gross motor activities. He is very enthusiastic about working and keeps on task when it is clear what is expected of him. He cooperates with co-workers.

2. NEEDS

As shown in the cafeteria and Purdue Pegboard, Mike has difficulty with fine motor tasks. Mike has been receiving speech therapy in school. More social interaction is desirable so Mike will develop better communication skills and be more assertive. Mike needs to develop more realistic career goals.

3. INTERESTS

Mike said he wanted to learn how to drive a truck or ambluance. When other options were suggested by the teacher he said he wasn't interested. His parents would like to see him work at Goodwill or work in a food service, janitorial or laundry service. The Reading-Free Voc. Interest Inv. showed an interest in automotive, building trades, and jantiorial services.

4. SUMMARY/RECOMMENDATIONS

Mike's experience in the cafeteria, performance on assessment techniques, and interviews show that he is capable in performing employable tasks. Since Mike is interested in the automotive trade, I recommend that he be assigned to Smith Body Shop which entails mainly janitorial services when Mike participates in EBCE next fall. I also recommend that Mike be enrolled in Mrs. Betterman's Essential Living Skills class since works a great deal on social skills and has good rapport with Mike.

VOCATIONAL PROGRAM STATEMENT

STUDENT Mike Williams AGE 15 SCHOOL Cedar Falls High School SCHOOL YEAR Fall 82/83

CLASSROOM TEACHER'S SIGNATURE _____ SUPPORT PERSON/OTHER SIGNATURE _____

TITLE _____

## VOCATIONAL GOALS

(include academic & community, interpersonal & social, personal care, vocational independence, work skills)

1. The student will work to improve basic math skills (subtraction, multiplication, division).
2. The student will work to improve math skills for handling money.
3. The student will develop functional reading skills (sight survival words, improve reading level, comprehension).
4. The student will be able to use the newspaper (e.g. want and sales ads, entertainment, front page).
5. The student will develop appropriate communication skills with supervisors and peers.
6. The student will develop appropriate job interviewing skills.
7. The student will be able to fill out a job application form.
8. The student will be able to use city transportation facilities independently.
9. The student will complete a unit on voting skills.
10. The student will complete a unit on map reading skills.
11. The student will learn janitorial and automotive skills (e.g. sweeping, cleaning restrooms, washing vehicles, cleaning windshields, changing oil).

INTEGRATION DATA (specify both regular and special class and vocational placement schedule):

1. English
2. Essential Living Skills
3. Math
4. Study Hall
5. P.E. M,W,F
6. Social Studies

VOCATIONAL PROGRAM STATEMENT
(continued)

| SHORT TERM OBJECTIVES | INTERVENTION MATERIALS AND RESOURCES | PERSONS RESP. FOR IMPLEMENTATION STARTING AND COMPLETION DATES REVISIONS RECOMMENDED |
|---|---|---|
| 1. Complete 3 digit subtraction with bothering with 90% accuracy. | 1. Teacher worksheets | 1. Mrs. Jones, August 25 - October 1 |
| 2. Complete 2 digit multiplication with bothering with 90% accuracy. | 2. Teacher worksheets | 2. Mrs. Jones, September 15 - October 15 |
| 3. Complete division facts with 90% accuracy. | 3. Teacher worksheets | 3. Mrs. Jones, October 15 - December 23 |
| 4. Make change with $50 with 95% accuracy. | 4. Basic Skills in Using Money<br>Mathematics in Living Book | 4. October 1 - December 23 |
| 5. Say 70 sight words with 90% accuracy. | 5. Wilson's Essential Vocabulary | 5. August 25 - December 23 |
| 6. Improve reading level 1 grade level - improve comprehension skills (recall, details, sequence, details, inference). | 6. Newspaper<br>Library materials | 6. August 25 - December 23 |
| 7. Improve social skills - small talk, greetings, introductions, farewells, asking and answering questions in complete sentences. | | 7. Mrs. Betterman, August 25 - December 23 |
| 8. Read a bus schedule and ride a bus independently. | 8. bus schedules<br>ride a bus | 8. Mrs. Jones, August 25 - October 15 |
| 9. Complete a job application with 100% accuracy | 9. Job applications<br>Entering the World of Work | 9. Mrs. Jones, October 15 - December 23 |
| 10. Develop job interviewing skills (appropriate dress, answering and asking questions) | 10. Entering the World of Work | 10. Mrs. Jones, November 1 - December 23 |
| 11. Complete voting registration form, voting terms, ballots, current office holders and jobs. | 11. Teacher material<br>ballots registration forms,<br>Our America | 11. August 25 -October 15 |
| 12. Answer questions using city maps and road maps as references. | 12. Telephone book<br>City and Road Maps | 12. Mrs. Jones, October 15 - December 23 |
| 13. On-the-job Training (janitorial, automotive) Smith Body Shop | | 13. Mr. Al Smith, October 1 - November 15 |